Gastric Polyposis

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• In a series of 48 cases of gastric polyps, 40 patients had benign lesions while the polyps in the remaining eight cases were malignant. Although the symptomatology in this series was not uniform, only one patient was entirely asymptomatic. Of the eight patients with malignant lesions, three had polyps which could well be described as small, suggesting that size may not be a reliable criterion of benignity even in a single lesion.

Laboratory studies indicated that anemia, achlorhydria and occult blood in the stools are frequently associated with gastric polyps. There was no apparent correlation, however, between these phenomena and the benign or malignant nature of the lesions.

X-ray examination, performed in every instance, was completely negative in six cases and inconclusive in an additional five. Gastroscopy did not reveal the presence of polyps in three of 15 cases. Malignant change was detected by cytologic examination in one case in which both roentgen and gastroscopic examination were negative.

The author believes that in most cases of gastric polyps operative treatment affords the greatest degree of safety. An operative procedure of considerably less extent than total gastric resection often is feasible. However, if true polyps occur where removal can be effected only by total gastric resection, the incidence of malignant change in these lesions would seem to indicate the advisability of such a procedure unless positive contraindicating conditions are present.

ALTHOUGH GASTRIC POLYPS were first identified at autopsy in 1761, almost a century elapsed before the first clinical diagnosis was made. Even with the advent of roentgenoscopy, first used in the diagnosis of gastric polyps in 1911 by Heinz,[11] and more recently of gastroscopy following Schindler's successful application of this method in 1922,[1] antemortem diagnosis has remained relatively infrequent. Most investigators agree that the reported incidence does not reflect the true occurrence of these lesions, since they tend to produce only mild symptoms or to remain completely asymptomatic for long periods.

Opinion has been considerably more divergent, however, regarding the preferred method of treatment. Behind this disagreement lies the crucial question of whether benign gastric polyps may act as precursors of carcinoma or undergo malignant degeneration with sufficient frequency to warrant surgical removal.

A review of the literature in 1950 by Edwards and Brown[3] emphasized the long-standing division among investigators on this vital point. Many believe that most benign-appearing gastric polyps should be surgically removed owing to the incidence of malignant degeneration and the uncertainty of all available diagnostic procedures in detecting malignant transformation.[3, 7, 8, 13] Since Brunn and Pearl[1] published their comprehensive report in 1926, various investigators have reported manifestations of malignant change in from 6 per cent to 51 per cent of cases.[9] Edwards and Brown[3] felt that gastric carcinoma frequently occurs in association with benign gastric polyps and that malignant degeneration may take place in apparently benign lesions. In 1951, Klein and Geller[7] described a case which they believed afforded clinical demonstration of malignant transformation. In a discussion of cases observed at Lahey Clinic, Marshall[8] (1952) reported that 30 per cent of the gastric polyps removed by excision or partial gastric resection were malignant.

At the same time, other investigators expressed the opinion that malignant degeneration is sufficiently unlikely in benign polyps to make conservative treatment the procedure of choice in many instances.[2, 6, 9] A recent article by Hay[6] (1953) emphasized this view and the clinical factors upon which it rests. After observing asymptomatic patients with benign-appearing lesions who were subjected to operation on the grounds that the lesions might be precancerous, Hay felt that the risk of surgical treatment might be greater than that of malignant degeneration and undertook a further study of the differential diagnosis between benign and malignant adenomas. He concluded that those patients who are asymptomatic or mildly symptomatic, with polyps less than 2 cm. in diameter which appear benign to the gastroscopist and the roentgenologist should not be operated upon, but should

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TABLE 1.—*Gastric polyps, 1919-1951*

	Single	Multiple
Men	7	18
Women	13	10
Total	20	28

TABLE 2.—*Symptoms of gastric polyps*

	Benign	Malignant
Epigastric distress—fullness, non-radiating pain, heaviness	21	4
Abdominal pain	7	1
Anorexia and nausea	3	5
Vomiting	4	4
Diarrhea	6	1
Tarry stools	2	3
Weakness	3	2
Constipation	3	1
Belching and sour stomach	5	1
Dyspnea	4	..
Weight loss	2	2
Dysphagia	1	..
Asymptomatic	..	..

be observed every three to four months for the first year and biannually thereafter. He favored operation if the polyps are larger than 2 cm. in diameter, if malignancy is suspected on the basis of gastroscopy or x-ray examination, if the clinical symptoms are severe, and in patients who cannot be adequately followed.

Recent observation of a degenerative course in three patients who at original clinical examination appeared to have benign gastric polyps prompted a review of all cases treated on the Medical and Surgical Services of the University of California Hospital during the last three decades.

During the 32-year period from 1919 to 1951, 48 patients with gastric polyps were observed. In 40 cases the polyps were benign, in eight, malignant. As indicated in Table 1, the series as a whole closely reflects the equal incidence in men and women cited by several investigators. However, there was a considerably higher incidence of multiple polyps in men than in women. The largest single group was made up of patients in the seventh decade of life. The youngest patient in the series was 16 years of age, and the oldest was 77, while the average age was 55 years. The distribution by decades was as follows: 10-19 years, one patient; 30-39, seven; 40-49, ten; 50-59, eight; 60-69, fourteen; 70-79, eight.

The symptomatology of gastric polyps is neither clear-cut nor uniform. Table 2 summarizes the symptoms observed in the present series. Epigastric distress, present in over half of the cases in the series, is probably the complaint most frequently encountered upon clinical examination, as has been noted in other reports. Abdominal pain, anorexia and vomiting or nausea each occurred in eight cases, while diarrhea, the next most prevalent symptom, was present in seven cases. Only one patient with gastric polyps was free of symptoms referable to

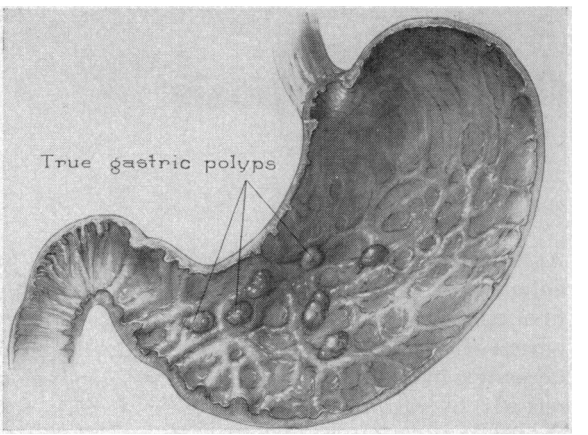

Figure 1.—The adenomatous nature of this type of gastric polyp is evident. The mucosa is either normal or somewhat atrophic.

the stomach. This is in striking contrast to some reports in which approximately 45 per cent of the patients with benign lesions were considered asymptomatic.[6]

It is characteristic of gastric polyps that symptoms may persist for many years. In the present series six patients had had varying degrees of discomfort for more than ten years; four for five to ten years; six for two and a half to five years; ten for one to two and a half; nine for six months to one year; nine for one month to six months, and three for less than one month. There were two patients with malignant lesions in this group, one of whom had had epigastric distress for 20 years, while the other had had sour stomach and flatulence for as long as 11 years. One patient with a benign lesion had had constipation for 30 years and abdominal pain for six; another whose polyp was benign had had epigastric distress for 15 years. A recent increase in severity of symptoms had occurred in seven cases, three of which were subsequently proved to be malignant. From our series, it would seem that neither the duration nor the severity of symptoms in gastric polyps is sufficient to provide a basis for differential diagnosis as to malignant or benign lesions.

Most reports in the literature have indicated that gastric polyps are only rarely associated with polyps elsewhere in the intestinal tract. In this series gastric polyps occurred in association with polyps in other segments of the intestine in only four cases—in the rectum in two cases and in the duodenum in two.

From the standpoint of malignant degeneration, the pathologic features of these lesions are especially significant. In 1888, Menetrier identified and described two kinds of multiple gastric polyps.[1] One type is composed of discrete lesions scattered over the surface of the mucosa. The polyps may arise from the mucosa by pedicles of varying length, or may lack this stalklike structure entirely and emerge broad-based from the mucous membrane (Figure 1).

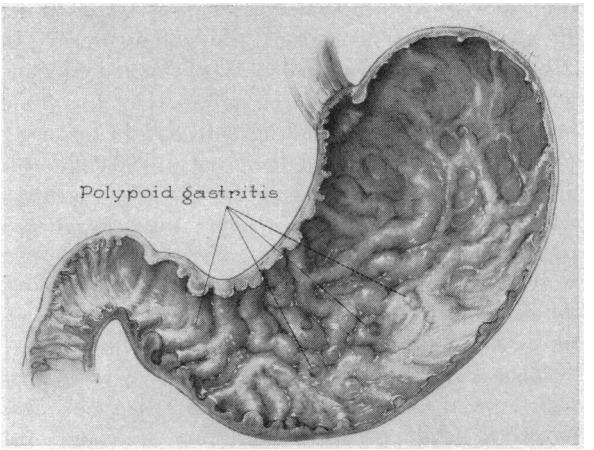

Figure 2.—Note the irregular plaque-like masses superimposed upon the hypertrophied gastric mucosa.

In the second type, the polyps occur as clearly defined plaques or masses on the periphery of the folds of hypertrophic mucosa (Figure 2). The precise nature of these two patterns of overgrowth of gastric mucous membrane, namely, the true adenomas (Figure 3) and the inflammatory hyperplasias, has been a matter of considerable discussion. In the latter instance, the pathologic changes are those of hyperplastic chronic gastritis, wherein hyperemia and edema of the enlarged and tortuous gastric rugae are prominent features (Figure 4). Although polypoid gastritis is not neoplastic in itself, but rather represents areas of metaplasia and irregular clusters of cells, true adenomas developing upon the hypertrophic gastric folds have been described by some investigators. Undoubtedly some cases previously described as gastric polyps have in reality been polypoid hypertrophic gastritis. Although such conditions may seriously affect health, there is general agreement that there is less risk of malignant change in polypoid gastritis than in true adenomatous polyps of the stomach.

It is unfortunate that so ambiguous a term as "gastric polyposis," which has been used to indicate multiple polyps of either type, has been so widely adopted. Had the two terms "polypoid adenomas of the stomach" and "polypoid gastritis" been consistently applied instead, there would undoubtedly have been far less confusion as to the exact type of pathological entity involved.

Some investigators have used the term "polyposis" to apply only when three or more polyps were present and have classified cases of two polyps as single. It is the author's feeling, however, that any case in which there is more than one polyp should be considered as multiple. Cases are so tabulated herein. Thus in this series, there were 28 cases in which more than one polyp was present; in 14 of them the lesions were discrete, while in the remaining 14 diffuse polyposis was present in association

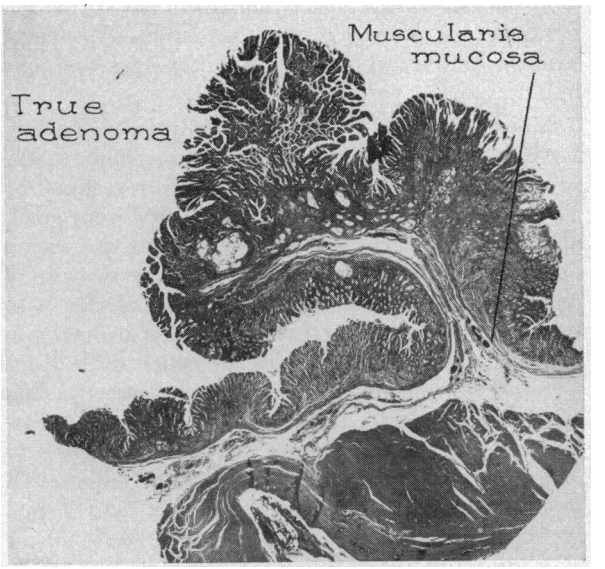

Figure 3.—The villous nature of this type of true polyp is evident. The stalk includes the muscularis mucosae. Edema and increased vascularity are not prominent features.

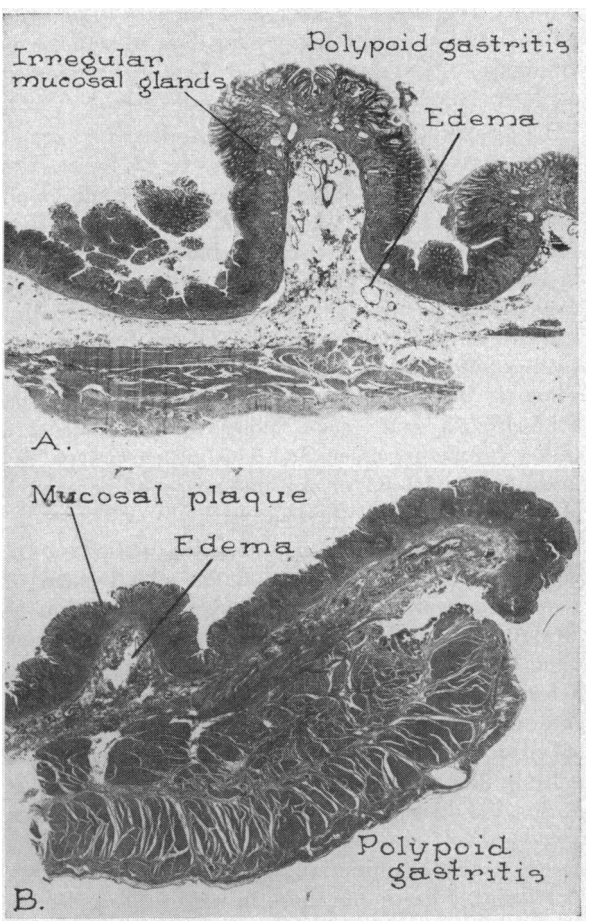

Figure 4. *A*—Note the edema and the enlarged vascular channels in the submucosa extending up as a stalk to form a pseudopolyp. *B*—The mucosal glands are distorted and hypertrophied.

with hypertrophied gastric mucosa. Four of the patients in the former group had two polyps each, while nine had from three to six polyps and one had 15.

Laboratory studies have demonstrated some uniformity of findings in gastric polyps, both in the present series and in reports of other investigators. The results of blood studies in 37 cases were available. In 18 cases the hemoglobin content was within normal limits, while in 19 cases varying degrees of anemia were observed. Of the eight patients with malignant lesions, four had subnormal hemoglobin content (values as low as 74 per cent) while three were within normal limits and in one case the data were not available. However, in this series, some patients with benign disease had greater degrees of anemia than did those with malignant lesions. Of the patients with benign lesions six had hemoglobin values of less than 65 per cent, while in one case the value was as low as 12 per cent.

Achlorhydria was frequently present. No free acid was detected in 27 of 32 cases in which gastric analysis was done; in the other five acidity was normal. The lack of gastric acid appears to be even more common in multiple polyps than in actual carcinoma of the stomach; in fact Tempest[11] reported achlorhydria in about 95 per cent of cases.

Laboratory records of stool studies for occult blood were available in 40 cases. In 24 the results were negative; in 14 the reaction for occult blood ranged from 1 plus to 4 plus, and in two others was "strongly positive." No occult blood was detected in four of the eight patients with malignant polyps; results were positive in two cases, and in the remaining two no data were available. Of the five patients with occult blood of 4 plus, four had benign lesions. Thus, it would seem apparent that while anemia, achlorhydria and occult blood in the stools are rather frequently associated with gastric polyps, the findings are by no means indicative of benign or malignant nature of the lesions.

Much of the discussion concerning malignant degeneration has hinged around the effectiveness of roentgenographic and gastroscopic examination in establishing a differential diagnosis.[2, 8] In the report upon their first series Brunn and Pearl stated that a definite abnormality had been observed in every case in which x-ray studies were accomplished. Their subsequent observations, however, indicated that a definite diagnosis could not always be made by this means.[10] Edwards and Brown[3] reported that x-ray investigation was diagnostic in 55 per cent of 31 cases on first examination, or 84 per cent including "suspicious" cases and those in which filling defects were noted.

In the present series, roentgenographic examination was performed in every instance. In 32 (66 per cent) polyps were indicated in the first examination. In an additional five cases, the polyps were misdiagnosed as another disease or overlooked entirely, while in five other instances polyps were identified only as "growths" or "filling defects." In six cases (12.5 per cent) the roentgenogram was negative for any disease of the stomach. Of the eight patients with malignant lesions, polyps were diagnosed roentgenographically in six, while filling defects were noted in the remaining two. In two instances, the possibility of malignant disease was indicated on the basis of the roentgen examination.

Gastroscopy was performed in 15 cases in this series. In three cases, gastroscopic diagnosis was negative, while x-ray examination indicated the presence of polyps. Similarly, in three other cases the x-ray diagnosis did not indicate any disease of the stomach, whereas polyps were detected by gastroscopy. In one additional case, the abnormality was diagnosed as ulcer on x-ray examination but identified as polyps by gastroscopy. This comparison would serve to support the view expressed by Paul and Logan[9] and others that the two methods are complementary as diagnostic procedures. More significant, however, from the standpoint of this analysis is the fact that in an appreciable proportion of cases, both methods may fail to reveal the presence of the gastric lesion. In one series reported in the literature, the benign or malignant nature of the polyps could not be diagnosed by either technique in approximately one-third of the cases.[5]

Most investigators who favor a period of medical observation for the majority of benign cases usually base their decision as to which lesions should be treated nonsurgically in part on the size of the polyp. In the present series the largest single lesion was approximately 10 cm. in diameter, while in six cases the polyp was 2 cm. or less in diameter. In six other cases no indication of size was recorded, while the remainder of the single lesions were between 3 and 7 cm. Of particular significance, however, is the fact that in three of the cases in which there was evidence of malignant degeneration the polyps were 2 cm. or less in size. In one case, one polyp was present; another involved three polyps, while in a third case of discrete polyposis none of the polyps observed exceeded 2 cm. The experience in this limited number of cases suggests that the size of the lesion has no definitive diagnostic relationship to possible malignant degeneration.

Recently the author applied cytologic examination as a method of studying gastric polyposis. By means of papain lavage, rich cellular material from the gastric mucosa may be obtained for direct observation. This technique has proved its effectiveness in detecting malignant disease when both x-ray and gastroscopic studies have been inconclusive (see

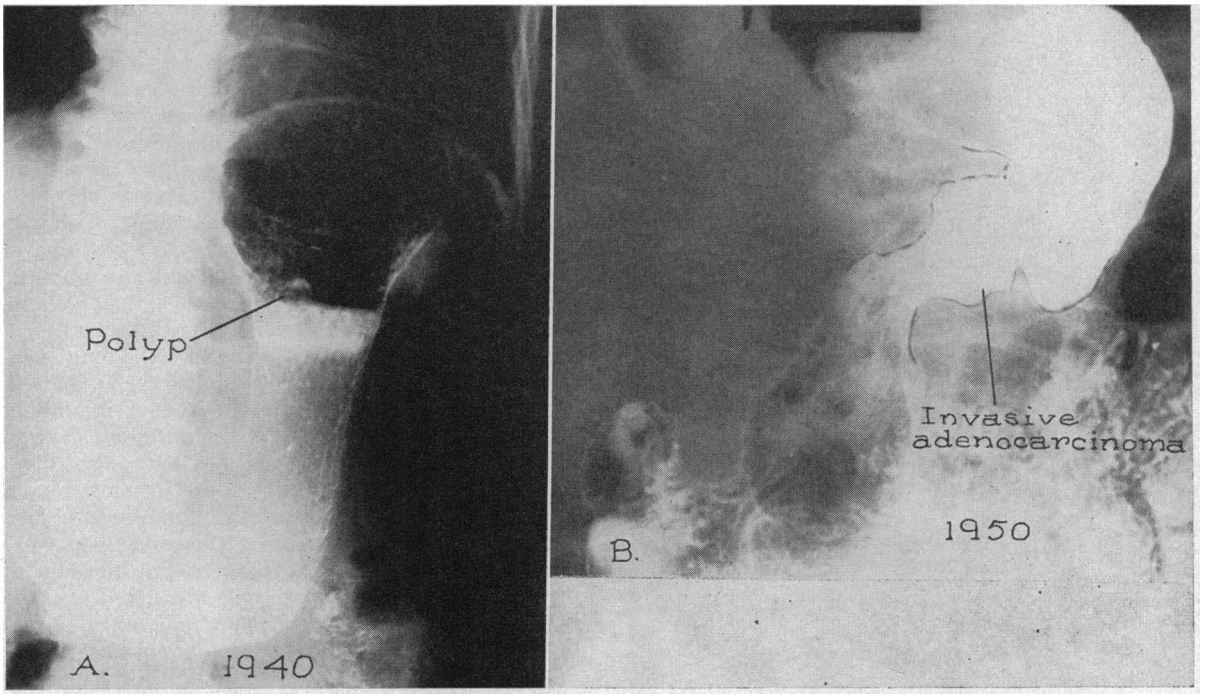

Figure 5. *A*—**Polyp on the anterior wall of the upper stomach.** *B*—**Repeat x-ray studies in the presence of clinical symptoms demonstrated a large infiltrating gastric carcinoma in the exact site of the gastric polyp noted ten years previously.**

Case 2 below). Papain lavage was not used in a sufficient number of cases in the series to warrant definitive conclusions. However, it has proved of value in the diagnosis of gastric cancer.[4] It is to be anticipated that as increasing numbers of cases are observed by this method, it may well provide a means of further establishing benignity or malignancy of gastric polyps and a technique which can be applied to the detection of malignant change in subsequent follow-up of benign cases.

At present, however, the possibility of malignant degeneration seems sufficiently established, and the detection of polyps or the malignancy of polyps sufficiently uncertain as to make surgical removal necessary to insure the greatest degree of safety for most patients. Three cases in the present series particularly emphasize the tendency of benign polyps to undergo malignant change. A detailed review of these cases is presented below:

CASE REPORTS

Case 1. The patient, 67 years of age, was observed in the out-patient department on June 15, 1940, at which time a small area of tenderness was noted on deep palpation directly over the epigastrium. X-ray examination indicated pronounced hypertrophic gastritis with a questionable small soft tissue mass in the fundic portion of the stomach. The patient refused gastroscopy. On May 13, 1941, a second x-ray examination revealed a polyp 12 mm. in diameter on the anterior wall of the stomach 7 cm. below the diaphragm. This diagnosis was confirmed by two subsequent roentgenograms. Operative removal was suggested but the patient refused.

Ten years later, in June 1951, the patient was observed in the surgical clinic. For the previous six months she had noticed epigastric distress, not particularly related to meals. Progressively increasing dysphagia had been present for three months; during the preceding three weeks the patient had only been able to take fluids and had had frequent regurgitation. There had been a recent loss of weight, but neither hematemesis nor melena was present.

X-ray examination was again carried out, and the diagnosis was obstructing carcinoma of the upper stomach invading the esophagus. At this examination the radiologist observed, "It is very interesting to note that ten years ago this patient was examined in this department and a single small polyp was seen in the exact location of the present carcinoma" (Figure 5). Exploratory laparotomy was carried out but the growth was so extensive that only palliative gastrostomy was done. The pathologist's report confirmed the x-ray diagnosis of carcinoma at the cardioesophageal junction.

This case, which is similar to that reported by Klein and Geller,[7] would seem to provide clinical demonstration of malignant degeneration of a gastric polyp.

Case 2. A 65-year-old woman entered the hospital on June 18, 1951. Her history indicated that 20 years previously she had noted an episode of epi-

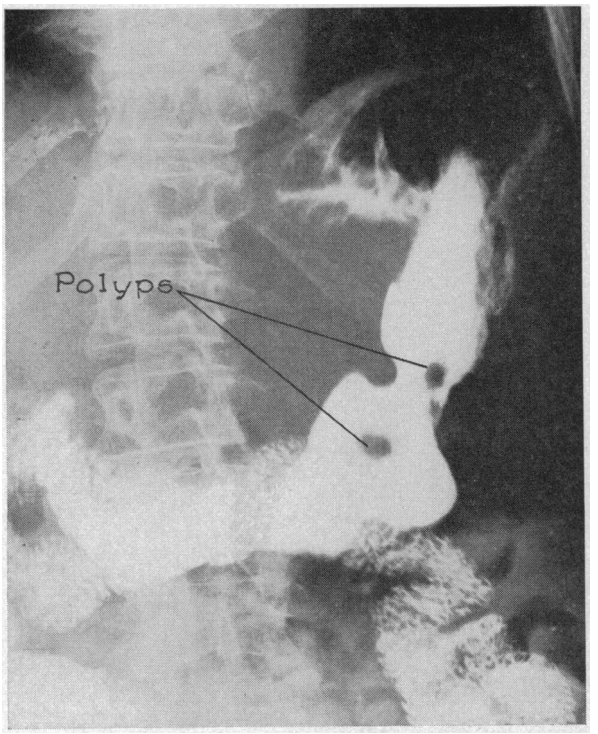

Figure 6.—The two polypoid masses were demonstrated by gastrointestinal study. Preoperative cytologic study indicated the presence of "cells suspicious for malignancy." Numerous true adenomas, one of which was malignant, were found at operation.

gastric heaviness after eating, and loss of appetite. At that time a diagnosis of atrophic gastritis was made, and the patient was treated for vitamin deficiency. In 1947 x-ray and gastroscopic examination had been performed and gastric polyposis was diagnosed. Films taken in 1948 and in May 1951 also showed the polyps. Just before hospitalization, a series of "nervous upsets" had brought on a recurrence of indigestion. The patient had never had vomiting, hematemesis, severe abdominal pain, constipation or melena. Symptoms were confined to the upper abdomen. The patient said that she had a "total lack of acid" and that she took hydrochloric acid with each meal. There had been no significant loss of weight.

X-ray examination on the day following admission again indicated gastric polyposis (Figure 6), and the radiologist noted that two of the polyps in the pars media appeared larger than in previous films. Two days later gastroscopic examination was performed. No evidence of infiltration was observed, but in comparison with the gastroscopic examination of June 1947, the polyps on the angulus appeared to have increased in size, and there were others on the posterior wall that had not been noted on previous examination. The gastroscopic diagnosis was gastric polyposis and general atrophic gastritis. Neither x-ray nor gastroscopic examination indicated possible malignancy.

Cytologic examination was then performed, using the papain lavage technique. Among the material aspirated from the gastric mucosa, several cells "suspicious for malignancy" were detected.

On June 25, 1951, operation was carried out. Numerous polyps, all entirely within the distal three-fifths of the stomach, could be palpated through the intact gastric wall. Because of these findings and the preoperative indication of possible malignant change subtotal gastrectomy was carried out.

Upon examination of the pathologic specimen multiple sessile polypoid structures up to 1.0 cm. in diameter were noted on both the anterior and the posterior gastric walls. There was a polypoid mass 2.0 cm. in diameter on the anterior wall. Microscopically, irregular areas of thickening and thinning of the gastric mucosa were observed. The sessile polypoid masses were composed of redundant mucous glands. Some of the cells showed a variation in total as well as nuclear size. In one polyp there were some papillary proliferation in one dilated gland structure near its surface. Multiple papillary projections and much cellular pleomorphism were present, and mitoses were frequent. No invasion of the submucosa or muscular coats was noted, and the lymph nodes along both greater and lesser curvature contained no metastatic malignant cells.

In the foregoing case of multiple gastric polyps, although only one lesion proved to be malignant, preoperative cytologic examination indicated the possibility of malignancy.

CASE 3. A woman 67 years of age was admitted to the University of California Hospital on March 3, 1951, for abdominal exploration on the basis of x-ray (Figure 7) and clinical findings. She had been seen in the surgical clinic on February 20, at which time she reported a loss of 25 to 30 pounds in body weight during the preceding six months. Considerable nausea and anorexia had occurred, but the patient had had only one episode of vomiting with hematemesis during that time. Occasionally a vague sense of epigastric fullness had been present, and diarrhea usually lasting two to three days had occurred about once a week.

The patient was operated upon March 5. When the peritoneal cavity was entered a small polyp was observed in the prepyloric area, and subtotal gastrectomy was carried out; three-fourths to four-fifths of the stomach was removed. The specimen was examined and found to contain two polyps in the antral area. There was a third small polyp on the posterior gastric wall immediately above the proposed line of anastomosis. It was decided, however, that total gastric resection, which would have been necessary in order adequately to excise the remaining lesion, was not indicated. This small lesion was therefore coagulated by means of the electrosurgical unit and an antecolic Mayo-Polya anastomosis was carried out. Pathological diagnosis indicated two gastric polyps, both of which showed focal adenocarcinoma in situ.

The patient was examined in the surgical clinic every six months after operation without evidence of recurrence until January 1954, when obstructive

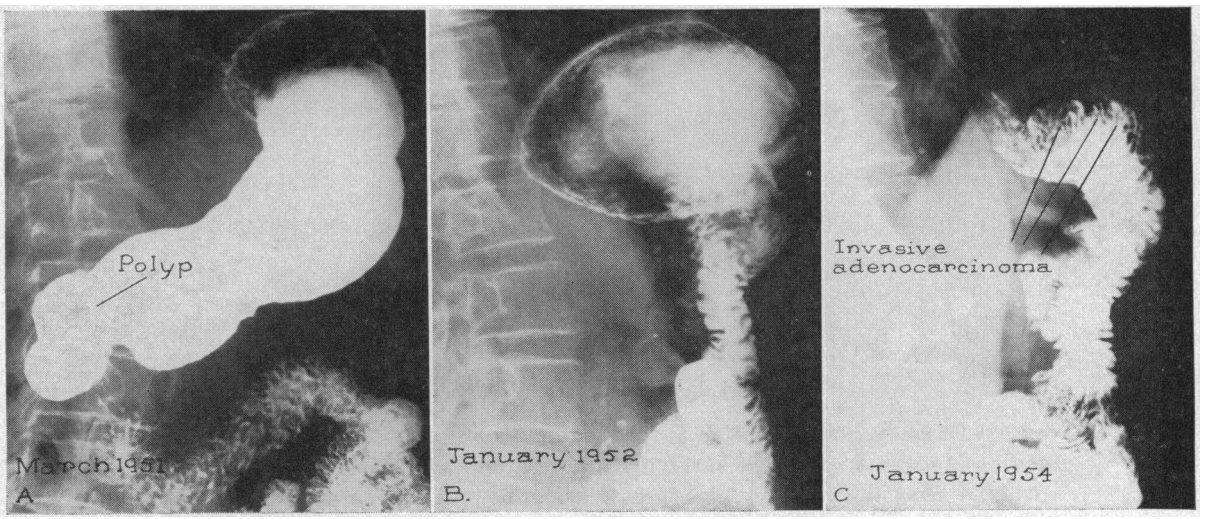

Figure 7.—Roentgen studies indicated a polyp in the prepyloric area. At operation a polyp high in the stomach (*A*) was electrocoagulated. Follow-up studies a year later showed no apparent disease. A well-functioning gastroenterostomy was present. (*B*) Obstructive symptoms developed three years after operation. (*C*) The entire gastric pouch was replaced by malignant disease.

symptoms were noted for the first time. She was observed at short intervals thereafter until March 1954, when x-ray evidence of stricture and the development of severe dysphagia led to emergency hospitalization. At operation March 11, 1954, a combined thoracoabdominal incision was made. A hard 10 cm. mass, which grossly was carcinomatous in character, was found in the residual stomach. It extended retroperitoneally into the region of the celiac axis and the aorta, and into the cardioesophageal junction. The remnant of stomach was removed and esophagojejunal anastomosis was done. Pathologic diagnosis indicated adenocarcinoma of the stomach with extension into the esophagus and jejunum with metastasis to lymph nodes.

The history and the subsequent course in the foregoing case strongly suggest that the third polyp which was present but not removed at the time of the first operation also contained adenocarcinoma and that it was not completely destroyed by the electrocauterization.

DISCUSSION

The three cases reported illustrate the malignant degeneration that may occur with nonoperative treatment. The author believes that in view of the degree of uncertainty inherent in all the diagnostic procedures now available, surgical removal is most likely to afford the patient the greatest degree of safety in most instances. It has been pointed out in several series reported in the literature that polyps tend to appear most often in the distal half or two-thirds of the stomach. In 21 of the 34 patients in the present series who were operated upon, the polyps were so located as to permit complete removal by either a Billroth I operation or subtotal gastric resection. In view of the malignant potential of these lesions, gastrectomy is probably the procedure of choice. However, as in this series wherein simple polypectomy was performed in 11 cases, wide local excision of the lesion with a generous segment of the gastric wall about the base of the polyp may be entirely adequate for single lesions. In such cases, however, immediate pathologic diagnosis of the excised specimen is necessary, and if malignant change exists gastric resection should be performed. Total gastrectomy was carried out in one of the two remaining patients treated operatively (both of whom had malignant change) while in the other the operative procedure was terminated after gastrostomy was performed to relieve cardioesophageal obstruction.

The author is of the opinion that if evidence of malignant change is present preoperatively and if many polyps involving the entire stomach are present at the time of operation, the principle of total gastric resection can logically be entertained. In an appreciable number of such cases, the continuity of the intestinal tract can be reestablished by simple esophagoduodenostomy or by the use of colon or jejunal segments to replace the excised stomach.

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REFERENCES

1. Brunn, H., and Pearl, F.: Diffuse gastric polyposis: Adenopapillomatosis gastrica. Report of five proven and seven probable cases, Sur., Gyn. and Obst., 43:559-598, 1926.

2. Carey, J. B., and Hay, L. J.: Gastric polyps, Gastroenterology, 14:280-286, Feb. 1950.

3. Edwards, R. V., and Brown, C. H.: Benign gastric polyps and their relation to carcinoma of the stomach, Gastroenterology, 16:531-538, November 1950.

4. Grimes, O. F., Traut, H. F., Wood, D. A., and Farber, S. M.: A clinical report on the cytologic diagnosis of gastric cancer, Sur., Gyn. and Obst., 98:347-352, March 1954.

5. Hardt, L. L., Steigman, F., and Milles, G.: Gastric polyps, Gastroenterology, 11:629-639, November 1948.

6. Hay, L. J.: Polyps and adenomas of the stomach, Surgery, 33:446-467, March 1953.

7. Klein, H. C., and Geller, J. S.: Gastric polyp to gastric carcinoma, Gastroenterology, 17:442-444, March 1951.

8. Marshall, S. F.: Gastric polyposis, Surg. Clin. N. Am., 32:857-865, June 1952.

9. Paul, W. D., and Logan, W. P.: Polyps of the stomach with reference to the gastroscopic findings, Gastroenterology, 8:592-606, May 1947.

10. Pearl, F. L., and Brunn, H.: Multiple gastric polyposis, Surg., Gyn. and Obst., 76:257-281, March 1943.

11. Spriggs, E. I., and Marxer, O. A.: Polyps of the stomach and polypoid gastritis, Quart. J. Med., 12:1-60, 1943.

12. Tempest, M. N.: Diffuse polyposis of the stomach: report of a case, Brit. J. Surg., 38:525-526, April 1951.

13. Wise, R. A.: Diffuse polyposis of the stomach, total gastrectomy, Arch. Surg., 61:95-101, July 1950.

The A.M.A. and Federal Legislation

TROUBLE, tragedy, and dissension are the major ingredients in the news today. Little attention is given to activities involving progress and agreement. Health legislation provides a good illustration of that point. During the past year or more the American public has become aware of the fact that the American Medical Association opposed the federal reinsurance proposal, disapproved of two provisions in the Social Security Act amendments, and disagreed with the government policy on medical care for veterans with nonservice-connected disabilities. Unfortunately, however, the public is not equally aware that during that same period of time the A.M.A. was giving active support to a large number of constructive legislative proposals involving medicine and health. We believe, therefore, that some long-overdue attention should be paid to the positive side of the record.

That record shows that the A.M.A. supported 11 of the 15 major medical bills that were enacted into law by the 83rd Congress. The Association opposed only two of the 15, and took no stand on the other two. The 11 proposals that the A.M.A. favored and which became public law were as follows:

Expansion of the Hill-Burton Hospital Construction Act to help finance the building of new nonprofit health facilities

Extension of the regular Hill-Burton Act to 1960

Lowering of the medical expense tax deduction from 5 per cent to 3 per cent

Extension of the "Doctor-Draft" law to 1955

Establishment of the Department of Health, Education, and Welfare

Establishment of the Hoover Commission on Organization of the Executive Branch of the Government

Establishment of the Commission on Intergovernmental Relations

Transfer of the Indian hospital and medical service from the Department of the Interior to the Public Health Service

Ban against the shipment of fireworks into states where their sale is illegal

A federal charter for the National Fund for Medical Education

Permission for oral narcotic prescriptions under certain conditions and limitations.

In addition to those 11 measures, the A.M.A. also supported two major proposals that were not acted on by the 83rd Congress. These were the administration bill to streamline Public Health Service grants to the states and the Jenkins-Keogh bills to stimulate the establishment of private pension plans by self-employed persons and by employees not covered by company plans.

We may be indulging in a bit of wishful thinking, but it would be helpful if the American people had more knowledge of the fact that the A.M.A. every year supports constructive legislation. The positive side of the story may not have blood-and-thunder news interest, but it spells out steady, continued progress in protecting the public health and welfare.

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